Madroño, Vol. 52, No. 4, pp. 270–274, 2005

NOTEWORTHY COLLECTIONS

Arizona

ONCOSIPHON PILULIFERUM (L.f.) Källersjö [= *Cotula pilulifera* L.f.; *Matricaria globifera* (Thunb.) Fenzl ex Harv.; *Pentzia globifera* (Thunb.) Hutch.; *Pentzia pilulifera* (L.f.) Fourc.] (ASTERACEAE).—Maricopa Co: Off Bartlett Dam Road, ca. 1.5 mi W of Bartlett Reservoir (east of the turn off to Horseshoe Lake), south side of road. On east-facing slope, in shallow soils. With *Parkinsonia microphylla, Opuntia engelmanii, Canotia holacantha, Yucca baccata, Simmondsia chinensis, Calliandra eriophylla, Cylindropuntia acanthocarpa,* 8 May 2003, *Dixie Z. Damrel #V-898* (Tonto National Forest Herbarium, Phoenix). Pinal Co.: Casa Grande, hwy 84 ca. 0.1 mi W of Bianco, (32°52.771′N, 111°49.771′W), 1344 ft, roadside, May 2004, *F. E. Northam 3* (ASU). Maricopa Co.: South side of West Lone Cactus Dr. at North Second Avenue, south of Deer Valley Airport (33°40′17″N, 112° 4′40″W), 1000 ft., roadside with *Melilotus indicus, Sonchus asper, Lactuca serriola, Cynodon dactylon, Bromus, Ambrosia, Amsinckia intermedia, Sphaeralcea ambigua, Encelia farinosa,* 4 Mar 2005, *J. Anderson 2005-11* (ASU). Maricopa Co: Phoenix, Pecos road S of South Mountain Park, W of 17th Ave (33°17′28″N, 112°6′29″W), large population along roadside in Sonoran Desert with much *Larrea tridentata,* ca. 1400 ft, 10 Apr 2004, *L. R. Landrum & D. Lafferty 11010* (ASU). Maricopa Co: Phoenix, South Mountain Park (33°19′45.3″N, 112°2′30.7″W), upland desert over 0.5 mi from and road, with *Ambrosia dumosa, Encelia farinosa, Olneya tesota, Larrea tridentata, Parkinsonia microphylla,* 1600 ft, 24 Apr 2005, *L. R. Landrum & D. Lafferty 11015* (ASU). Maricopa Co: On exit of I-17 and Happy Valley Road (33°42.607′N, 112°6.994′W), 1436′, freeway exit roadside. Annual round golden heads, growing almost in a monoculture—abundant. 20 April 2005, *Dixie Z. Damrel et al.* 3084 (DES). Yavapai Co: Foothills of Black Mesa, near southern border of Agua Fria National Monument (34°5.147′N, 112°7.9701′W), 2055′, Arizona Uplands Sonoran Desert Scrub with *Carnegiea gigantea, Parkinsonia microphylla, Eriastrum, Schismus, Echinocereus engelmannii, Celtis pallida, Larrea tridentata, Opuntia engelmannii, O. phaeacantha, Cylindropuntia acanthocarpa, Krameria erecta, Bromus rubens, Lotus salsuginosus brevivexillus, L. strigosus tomentellus, Daucus pusillus, Plantago patagonica, Silene antirrhina.* Uncommon. 22 April 2005, *Dixie Z. Damrel et al. 3102* (DES). Yavapai Co.: Agua Fria National Monument, floodplain of the Agua Fria River, east bank. South-central end of the AFNM (34°6.149′N, 112°6.142′W), 2114′, loamy bottom soils of floodplain, disturbance-plant riparian. With *Hymenoclea salsola, Sisymbrium altissimum, Marah gilensis, Acacia greggii, Parkinsonia florida, Rumex hymenosepalus, Phalaris, Opuntia engelmannii, O. phaeacantha, Prosopis velutina, Bromus ssp., Avena fatua, Malva parviflora, Hordeum murinum, Xanthium strumarium, Astragalus.* One small clump of two plants, both collected, 22 April 2005, *Dixie Z. Damrel et al. 3117* (DES). Maricopa Co.: Inside Maricopa Flood Control area off of Jomax Rd., west of Cave Creek Rd. (33°44′28.55524″N, 112°02′47.70482″W), desert creosote flat with *Larrea tridentata, Ambrosia deltoidea, Lycium, Krameria grayi, Senna covesii, Cylindropuntia acanthocarpa, Echinocereus engelmannii, Ferocactus cylindraceous,* 499.72 m, 27 April 2005. *Laura Dugan & Sean Whitcomb V91–7* (ASU). Maricopa Co.: Peoria, at a private residence on 95th Ave. (33°43′25.36680″N, 112°15′44.86971″W), residential area with construction underway, leading into desert with *Parkinsonia microphylla, Prosopis velutina, Larrea tridentata, Ambrosia deltoidea, Ziziphus obtusifolia, Senna artemisioides, Aloe,* 427.60 m, 27 April 2005. *Laura Dugan & Sean Whitcomb* Q91-9 (ASU). Maricopa Co.: State Trust Land SW of the intersection of I-17 and Hwy 74 (33°46′07.94954″N, 112°08′35.78422″W), desert creosote flat with *Larrea tridentata, Lycium, Cylindropuntia leptocaulis, C. acanthocarpa, Prosopis velutina,* 481.98 m, 06 April 2005. *Laura Dugan & Sean Whitcomb T81-10* (ASU). Maricopa Co.: S of Skunk Creek, NW of the intersection of Joy Ranch Rd. and 19th Ave. (33°49′31.60311″N, 112°06′09.0270″W), desert creosote flat with small wash nearby with *Prosopis velutina, Cylindroputnia leptocaulis, C. acanthocarpa, Ambrosia deltoidea, Larrea tridentata, Sphaeralcea ambigua, Lycium, Ziziphus obtusifolia, Ferocactus cylindraceous,* 06 April 2005. *Laura Dugan & Sean Whitcomb U61-10* (ASU). Maricopa Co.: E of 23rd Ave. and N of Dynamite Rd. (33°46′15.15084″N, 112°05′30.55646″W), at the juncture of desert creosote flat and upland foothills with *Larrea tridentata, Lycium, Krameria grayi, Ambrosia deltoidea, Senna covesii, Cylindropuntia acanthocarpa,* 493.47 m, 06 April 2005. *Laura Dugan & Sean Whitcomb U81–17* (ASU). Maricopa Co.: 1.29 km E of the intersection of Lake Pleasant Rd. and Hwy 74 and 0.45 km N of Hwy 74 (33°48′07.84095″N, 112°13′43.43241″W), 479.32 m, desert with rocky soil, with *Cylindropuntia acanthocarpa* and weedy species,12 May 2005, *Laura Dugan & Sean Whitcomb R71-8* (ASU).

Previous knowledge. These are the first collections made of this species in Arizona as far as we know. It is already known in California (see A. C. Sanders, Madroño 43: 528. 1996; http://ucjeps.berkeley.edu/cgi-bin/get_cpn.pl?80983&expand = 1), the oldest known collection having been made in 1981. Photographs of Arizona plants have been posted on two websites, one [http://www.home.earthlink.net/~christrask/OncPil01.pdf] reporting a wild growing plant in 2003 at Seven Springs, a Forest Service Recreational site near Phoenix. This report is significant because a local botanical inventory was conducted there as recently as 2002, and *Oncosiphon* was not found (Doan 2002, Arizona State University, M.S. thesis).

Significance. Oncosiphon piluliferum is native to the Cape region of South Africa (Flora Capensis. Vol. 3, Harvey & Sonder. 1894). Common names include "stinkkruid" (Afrikaans), "stinknet" (Afrikaans), "cattle bush" and "globe chamomile" and the plant is indeed a relative of roman chamomile, *Chamaemelum nobile* (L.) All. The inflorescences are globe-like and the plant's odor is pungent. It is an attractive, graceful plant; seeds are offered for sale on the internet and it apparently has been sold in Arizona. We here list localities where single specimens were collected in 2003 and 2004 and 12 localities where the plant was collected during the spring of 2005. Such an apparently sudden appearance in the Phoenix area is probably real, as the plant seems to reproduce easily and to produce hundreds of small achenes. The spring of 2005

was especially wet and also coincided with a broad survey of the vegetation of the Phoenix area by the Central Arizona-Phoenix Long Term Ecological Research project at Arizona State University, making finding this plant more likely. In any case, as far as we know there are no prior collections in Arizona, but we expect *O. piluliferum* to become a widespread invasive species within a few years. We have observed additional populations along roads and in particular in natural desert conditions. The introduction of this species serves as an example of the potential impact of non-native ornamental plants, even attractive species, on native vegetation.

Prof A.E. van Wyk of the University of Pretoria in South Africa, was asked if he had any information about this species and he replied: "The widely used Afrikaans name "stinknet" means "stink only", because the plant is useless as a stock feed—it only stinks. Another commonly used local name, and perhaps the oldest in Afrikaans, is "stinkkruid", meaning "stink herb". In former times the plant was widely used medicinally in the Cape and it may have some virtues in this field. This is a strange species. Locally it has been reported from a very wide range of habitats and soil types, though usually in open, sunny locations. It behaves in a manner that makes one wonder whether it is really native to many parts of its current range in southern Africa. All over its range the species shows weedy tendencies by invading especially disturbed areas and cultivated fields. Being an annual, it is clearly a pioneer of disturbed sites. I suspect it is originally a species from the Cape Floristic Region, but due to agriculture has expanded locally beyond its original range. To confirm this one would have to trace the earliest known collections and check their localities. I can, however, confirm that it is not native to provinces such as North-West, Gauteng and Mpumalanga. Specimens from these areas are mainly from cultivated fields, especially fields that are under irrigation in winter. In such fields, the species can form dense, almost monospecific stands, whereas it is completely absent from adjacent natural vegetation. Hence in South Africa it clearly is a weed at times, a tendency which signals danger should the species spread far afield, as seems to be the case in the Phoenix area."

—L. R. Landrum, L. Dugan, S. Whitcomb, Arizona State University Herbarium, P.O. 874501, Tempe, AZ 85287. J. Anderson, BLM, Phoenix, AZ 85027. D. Damrel, Desert Botanical Garden, Phoenix, AZ 85008. F. E. Northam, 216 E. Taylor St., Tempe, AZ 85281.

California

Digitaria californica (Benth.) Henr. (POACEAE). San Diego County, 1 October 2003. Uncommon on rocky schist hillside at 33°03′N, 116°38′W, 290 m elevation, in Little Blair Valley, Anza-Borrego Desert State Park. Kim L. Marsden 154136 (SD), 1192 (BSCA).[Det. by Larry Hendrickson, 2 October 2003].

Previous knowledge. Arizona cottontop is native to northern and central Mexico, Baja California, Mexico, and Colorado, Arizona, New Mexico and Texas in the southwestern U.S.. [Flora of North America 25 (part 2): 358–383; Hitchcock, A.S. (rev. A. Chase). 1971. Manual of the grasses of the U.S.. Dover Publications, Inc. New York.]

Significance. First report and collection for California. This collection extends the western range of this species from Baja California, Mexico, near 31°46′N, 116°01′W [R. Moran, SD 63461] about 154 kilometers northward into southern California. The specific epithet *californica* refers to Baja California; the type collection is from Bahia Magdalena, Baja California, Mexico.

—Kim L. Marsden and Larry E. Hendrickson, California State Parks, Colorado Desert District, 200 Palm Canyon Drive, Borrego Springs, CA 92004.

Drosera × *hybrida* Macf. (Droseraceae)—Plumas county, California, 40°00.727′N, 120°59.586′W, elevation 1160 m, 1 September 2004. Plants were found flowering in a wet seep among *Drosera rotundifolia* L. at the Butterfly Valley Botanical Area near Quincy.

Previous knowledge. This taxon, a hybrid between the two eastern North American species *Drosera filiformis* Raf. and *Drosera intermedia* Hayne, is known only from a few locations in New Jersey (D.E. Schnell, 2002, Carnivorous Plants of the United States and Canada, Timber Press, Oregon, p 286); however, other populations of the hybrid may exist undetected in the eastern USA since the two parent species occur together in a number of other states (CT, MD, MA, NC, NY, RI for *Drosera filiformis* var. *filiformis*; AL, FL, GA, MS for *Drosera filiformis* var. *tracyi* (Macf. ex Diels) Diels). The colony of plants in Butterfly Valley, CA, was apparently introduced by carnivorous plant enthusiasts (in years past, other non-native carnivorous taxa have been found at this and other California sites).

Significance. This population of plants was detected by the author in September 2004. At that time, approximately 40–60 rosettes occupied an area only 20 × 40 cm in size. Although in flower, the inflorescences did not appear to be producing viable seed. (*Drosera* × *hybrida* is sterile.) Misidentifications of this cluster of plants are responsible for previous listings of *Drosera anglica* Huds. in Butterfly Valley, for example Forest Service records list the discovery of this cluster of plants, as "*Drosera anglica,*" by botanists in 18–19 September, 1992 (Jim Belsher-Howe, Plumas Forest Service, private communication). While *Drosera anglica* can be found in several sites within 50 km of this location, no genuine populations have been found in the Butterfly Valley Botanical Area. The two taxa can easily be separated by the shape of the glandular leaf blade; the leaf blade of *Drosera anglica* is approximately (2.5)3–7(10) times longer than wide, while the leaf blade of *Drosera* × *hybrida* is approximately 45–65 times longer than wide.

Drosera × *hybrida* reproduces by vegetative means only, primarily by the annual production of a few lateral hibernacula each fall. As such, this plant has very little chance of being a significant conservation threat to the Butterfly Valley Botanical Area. However, if horticulturists continue to use the area as a dumping ground for non-native carnivorous plants, an intractable greenhouse weed such as *Utricularia subulata* will eventually be introduced (perhaps unintentionally), as has already occurred in the Mendocino County pygmy forests.

Permission to collect specimens of these plants was kindly granted by staff of the Plumas National Forest Service. Live specimens have been placed in the University of California, Davis, Conservatory, for further study; an herbarium specimen has been stored at the University of California, Davis (DAV), #BR040901.

—Barry A. Rice, International Carnivorous Plant Society, P.O. Box 72741, Davis, CA 95617.